Important Advances in Clinical Medicine

Epitomes of Progress—Urology

The Scientific Board of the California Medical Association presents the following inventory of items of progress in urology. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in urology which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Urology of the California Medical Association and the summaries were prepared under its direction.

Reprint requests to: Division of Scientific and Educational Activities, California Medical Association, 731 Market St., San Francisco, CA 94103

Transpubic Urethroplasty for Membranous Urethral Strictures

REPAIR OF traumatic stricture of the membranous urethra is a significant surgical challenge because of the relatively inaccessible location of this portion of the urethra behind the symphysis pubis. Transpubic surgical operation was first applied to posterior urethral strictures in 1962, when Pierce used total pubectomy, but this approach has more recently been popularized by Waterhouse. The proposed advantages of this approach are its superior exposure and its applicability to strictures more than 1 cm in length.

The surgical objective is to bypass the stricture anteriorly. After removal of a trapezoidal piece of pubic bone, the distal urethra is mobilized, spatulated and anastomosed to the anterior prostatic urethra at its apex. The prostate is not mobilized and the stricture is not excised.

Transpubic urethroplasty has been successfully carried out in patients with membranous urethral strictures secondary to pelvic fractures with disruption of the prostatic-membranous urethra, strictures following transurethral external sphincterotomy and stricture due to a compromise of the membranous urethra during radical retropubic prostatectomy.

The transpubic approach to membranous urethral strictures affords superior exposure and allows a direct, undervision and tension-free anastomosis. Wedge resection of the pubis is recommended over symphysiotomy and separation of pelvic bones, which may cause pelvic pain and instability. Operative blood loss can be significant and bleeding is difficult to control until the wedge of pubis is removed. The level of urinary control may be lost if prostatectomy has been carried out in a patient or subsequently is required, unless the bladder neck remains intact. The use of a pedicle graft of omentum, placed over the anastomosis, may improve the success